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### NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

02/19/2010

John H Thomas 536 Granite Avenue Richmond, VA 23226 EXAMINER

VASUDEVA, AJAY

ART UNIT

PAPER NUMBER

3617

DATE MAILED: 02/19/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565.449	08/01/2006	Robert A. Dane	SOLAR 1	9828

TITLE OF INVENTION: UNMANNED OCEAN VEHICLE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	05/19/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correcte maintenance fee notifical	ed below or directed oth	ng the Patent, advance of herwise in Block 1, by (	orders and notification of a (a) specifying a new corres	maintenance fees will spondence address; a	ll be mailed and/or (b) in	d to the current of ndicating a separ	orrespondence address as ate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
John H Thomas 536 Granite Ave Richmond, VA 2	s enue	//2010	I he Stat add tran	reby certify that this	Fee(s) Tran	ailing or Transm nsmittal is being t postage for first E FEE address a 3-2885, on the da	dission deposited with the United class mail in an envelope bove, or being facsimile in indicated below.
							(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY	DOCKET NO.	CONFIRMATION NO.
10/565,449	08/01/2006		Robert A. Dane		SOI	LAR 1	9828
TITLE OF INVENTION							, ,
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TO	ΓAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0		\$1055	05/19/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS	J			
VASUDEV	VA, AJAY	3617	114-056100				
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Unl	ondence address (or Cha 3/122) attached. ication (or "Fee Address )2 or more recent) attach ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Com	"Indication form ned. Use of a Customer  A TO BE PRINTED ON ified below, no assignee	2. For printing on the p  (1) the names of up to or agents OR, alternati (2) the name of a single registered attorney or a registered patent attorney on the port of the part	o 3 registered patent vely, le firm (having as a ragent) and the names rneys or agents. If no printed.	nember a s of up to o name is	12	cument has been filed for
		4 permitted)	b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can The Director is hereby overpayment, to Depo	ase first reapply any rd. Form PTO-2038 is	previously is attached. e the require	y paid issue fee sl	
	s SMALL ENTITY state	us. See 37 CFR 1.27.	b. Applicant is no loned from anyone other than the Coffice.	ger claiming SMALI	LENTITY S	status. See 37 CF.	R 1.27(g)(2).
		ues I atem and Trademan					_
This collection of inform an application. Confident submitting the completed this form and/or suggesti	ation is required by 37 C tiality is governed by 35 d application form to the ons for reducing this bu	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to the	on is required to obtain or a 1.14. This collection is esty depending upon the individe Chief Information Office	retain a benefit by the timated to take 12 mi vidual case. Any com er, U.S. Patent and T	e public whi inutes to co iments on the rademark C	ich is to file (and mplete, including he amount of tim Office, U.S. Depar	by the USPTO to process) gathering, preparing, and e you require to complete tment of Commerce. P.O.

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10/565,449	08/01/2006	Robert A. Dane	SOLAR 1 9828		
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John H Thomas 536 Granite Avenue			VASUDEVA, AJAY		
			ART UNIT	PAPER NUMBER	
Richmond, VA 232	226		3617		
			DATE MAILED: 02/19/201	0	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/565,449	DANE ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Ajay Vasudeva	3617	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R	ears on the cover sheet w (OR REMAINS) CLOSED or other appropriate comm IGHTS. This application is	in this application. If not included nunication will be mailed in due co	urse. <b>THIS</b>
of the Office or upon petition by the applicant. See 37 CFR 1.313  1.   ☐ This communication is responsive to 10/20/2009.	and MPEP 1308.		
<ol> <li>The allowed claim(s) is/are 1,2,5-7 and 9-22.</li> </ol>			
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority ur</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> </ul>	be been received. been received in Applicati	ion No	
3. Copies of the certified copies of the priority do	cuments have been receive	ed in this national stage applicatio	n from the
International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. A SUBSTITUTE OATH OR DECLARATION must be submin INFORMAL PATENT APPLICATION (PTO-152) which give	IENT of this application. itted. Note the attached EX	(AMINER'S AMENDMENT or NO	
5. X CORRECTED DRAWINGS ( as "replacement sheets") mus	, , ,		
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Revie	ew ( PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date			
(b)   including changes required by the attached Examiner's Paper No./Mail Date 20100215.			
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			ack) of
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT</li> </ol>			e the
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 10/14/2009  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6.  ☐ Interview S Paper No 7.  ☑ Examiner's	nformal Patent Application Summary (PTO-413), ./Mail Date s Amendment/Comment s Statement of Reasons for Allowa	ance

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#### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr.

Brian Teague on 2/15/2010.

2. The application has been amended as follows:

In the Claims

• In claim 1 (line 12), after "drive the fluid drive element in a motor mode", --, and wherein

the vehicle further includes ballast tanks for selective submerging and re-surfacing of

the vehicle to facilitate selective operation on or below the water surface - has been

inserted.

Claim 3 has been canceled.

Claim 4 has been canceled.

• Claim 23 has been canceled.

### Drawings

3. The drawings filed on March 10, 2008 are objected to because of the following

informalities:

Figure 1, as filed on March 10, 2008, is oriented in wrong direction relative to the

orientation of figures 1 and 9-13 in the original drawing.

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Applicant is requested to file formal drawings with corrected orientation of figure 1.

Although not mandatory, Applicant is encouraged to file a <u>complete set</u> of drawings.

The corrected orientation of fig. 1 is required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The examiner can normally be reached on Monday-Friday 12:00 -- 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ajay Vasudeva/ Primary Examiner Art Unit 3617